

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF SOUTH CAROLINA

IN RE: AQUEOUS FILM-FORMING FOAMS PRODUCTS ) MDL No.  
LIABILITY LITIGATION ) 2:18-mn-2873-RMG  
\_\_\_\_\_  
 )  
ROY MARSHALL, )  
 )  
*Plaintiff,* ) **COMPLAINT**  
 )  
-vs- ) **Jury Trial Demanded**  
 )  
THE 3M COMPANY, f/k/a Minnesota Mining and )  
Manufacturing Co., )  
AGC CHEMICALS AMERICAS INC., )  
AMEREX CORPORATION, )  
ARCHROMA U.S., INC., )  
ARKEMA, INC., )  
BUCKEYE FIRE EQUIPMENT COMPANY, )  
CHEMDESIGN PRODUCTS INC., )  
CHEMGUARD INC., )  
CHEMICALS, INC., )  
CHEMOURS COMPANY FC, LLC, )  
CLARIANT CORPORATION, individually and as successor )  
in interest to Sandoz Chemical Corporation, )  
CORTEVA, INC., individually and as successor in interest to )  
DuPont Chemical Solutions Enterprise, )  
DEEPWATER CHEMICALS, INC., )  
DUPONT DE NEMOURS INC., individually and as )  
successor in interest to DuPont Chemical Solutions )  
Enterprise, )  
DYNAX CORPORATION, )  
E. I. DUPONT DE NEMOURS AND COMPANY, )  
individually and as successor in interest to DuPont Chemical )  
Solutions Enterprise, )  
NATION FORD CHEMICAL COMPANY, )  
THE CHEMOURS COMPANY FC, LLC, individually and )  
as successor in interest to DuPont Chemical Solutions )  
Enterprise, and )  
TYCO FIRE PRODUCTS, LP, individually and as successor )  
in interest to The Ansul Company, )  
 )  
*Defendants.* )  
\_\_\_\_\_  
 )

COMES NOW, the Plaintiff, by and through undersigned counsel, and alleges upon information and belief as follows:

### **INTRODUCTION**

1. This action arises from the foreseeable contamination of groundwater by the use of aqueous film-forming foam (“AFFF”) products that contained per- and poly-fluoroalkyl substances (“PFAS”), including perfluorooctane sulfonate (“PFOS”) and perfluorooctanoic acid (“PFOA”).

2. PFOS and PFOA are fluorosurfactants that repel oil, grease, and water. PFOS, PFOA, and/or their chemical precursors, are or were components of AFFF products, which are firefighting suppressant agents used in training and firefighting activities for fighting Class B fires. Class B fires include fires involving hydrocarbon fuels such as petroleum or other flammable liquids.

3. PFOS and PFOA are mobile, persist indefinitely in the environment, bioaccumulate in individual organisms and humans, and biomagnify up the food chain. PFOS and PFOA are also associated with multiple and significant adverse health effects in humans, including but not limited to kidney cancer, testicular cancer, high cholesterol, thyroid disease, ulcerative colitis, and pregnancy-induced hypertension.

4. At various times from the 1960s through today, AFFF Defendants designed, manufactured, marketed, distributed, and/or sold AFFF products containing PFOS, PFOA, and/or their chemical precursors, and/or designed, manufactured, marketed, distributed, and/or sold the fluorosurfactants and/or perfluorinated chemicals (“PFCs”) contained in AFFF (collectively, “AFFF/Component Products”).

5. AFFF Defendants designed, manufactured, marketed, distributed, and/or sold AFFF/Component Products with the knowledge that these toxic compounds would be released into

the environment during fire protection, training, and response activities, even when used as directed and intended by Defendants.

6. Since its creation in the 1960s, AFFF designed, manufactured, marketed, distributed, and/or sold by the AFFF Defendants contained fluorosurfactants and/or PFCs designed, manufactured, marketed, distributed, and/or sold by AFFF Defendants, used as directed and intended by Defendants, and subsequently released into the environment during fire protection, training, and response activities, resulting in widespread PFAS contamination.

7. Due to this contamination, Plaintiff has suffered real personal injuries, bioaccumulation of PFAS in their body as a result of the release of PFAS to their water supplies.

8. Plaintiff has suffered an assortment of diseases and medical conditions as a direct result of their exposure to the PFAS contamination of their water supply.

9. Plaintiff, as resident and those who visited, worked, or otherwise dwelled in the Site area(s), have been unknowingly exposed for many years to PFAS, including concentrations hazardous to their health.

10. Plaintiff's unwitting exposure to PFAS in their water supply as a result of the Defendants' conduct, is the direct and proximate cause of Plaintiff's injuries.

11. Plaintiff seeks recovery from Defendants for injuries, damages, and losses suffered by the Plaintiff as a result of exposure to the introduction of PFAS and other toxic substance into their water supply, and then into their properties and bodies, in an amount to be determined at trial, exclusive of interest, costs, and attorneys' fees.

#### **JURISDICTION AND VENUE**

12. The jurisdiction of this Court is invoked pursuant to 28 U.S.C. §1332(a)(1), because the Plaintiff and Defendants are citizens of different states and the amount in controversy

exceeds \$75,000.00, excluding interest and costs.

13. Venue is proper in this District Court pursuant to Case Management Order (“CMO”) No. 3 entered by this Court in *In Re: Aqueous Film-Forming Foams Products Liability Litigation*, MDL No. 2:18-mn-2873- RMG. Plaintiff states that but for the Order permitting direct filing in the United States District Court for the District of South Carolina, Plaintiff would have filed this Complaint in the United States District Court for the Middle District Court of Florida. Further, in accordance with CMO 3, Plaintiff designates the United States District Court for the Middle District Court of Florida as the home venue. Venue is originally proper in the District Court pursuant to 28 U.S.C. §1331 because it is the judicial district in which Plaintiff was a resident and/or citizen, a substantial part of the events or omissions giving rise to the claims occurred, and Defendants conduct business within the district.

### **PARTIES**

#### **Plaintiff**

14. Plaintiff, ROY MARSHALL, (“Plaintiff”) is a resident and citizen of Melbourne, Florida.

15. Based upon information and belief, Defendants’ fluorochemical products were used in a manner resulting in the contamination of the water supply in places where Plaintiff lived, including Florida (hereinafter the “Site”).

16. Plaintiff purchased and consumed water from public and/or private water suppliers at the Site, which were contaminated with Defendants’ fluorochemical products.

17. As a result of their exposure to Defendants’ fluorochemical products, Plaintiff was diagnosed with Kidney Cancer, which has caused Plaintiff to suffer severe personal injuries, pain, suffering, and emotional distress.

18. As a result of Plaintiff’s diagnosis and required treatment, Plaintiff has incurred and

will continue to incur significant medical expenses.

19. The injuries, pain, suffering, emotional distress, and economic loss are proximately caused by Defendants' fluorochemicals contaminating Plaintiff's water supplies.

20. To this day, Defendants' fluorochemical products remain in Plaintiff's body, subjecting them to ongoing exposure to fluorochemicals and further increased risk of disease.

### **Defendants**

21. The term "Defendants" refers to all Defendants named herein jointly and severally.

22. When reference is made in this Complaint to any act or omission of any of the Defendants, it shall be deemed that the officers, directors, agents, employees, or representatives of the Defendants committed or authorized such act or omission, or failed to adequately supervise or properly control or direct their employees while engaged in the management, direction, operation, or control of the affairs of Defendants, and did so while acting within the scope of their duties, employment or agency.

#### **i. The AFFF Defendants**

23. The term "AFFF Defendants" refers collectively to Defendants 3M Company, Amerex Corporation, Buckeye Fire Equipment Company, Chemguard Inc., and Tyco Fire Products L.P.

24. Defendant The 3M Company f/k/a Minnesota Mining and Manufacturing Co. ("3M") is a corporation organized and existing under the laws of the State of Delaware, with its principal place of business located at 3M Center, St. Paul, Minnesota 55144-1000.

25. Beginning before 1970 and until at least 2002, 3M designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

26. Defendant Amerex Corporation ("Amerex") is a corporation organized and existing

under the laws of the State of Alabama, with its principal place of business located at 7595 Gadsden Highway, Trussville, AL 35173.

27. Amerex is a manufacturer of firefighting products. Beginning in 1971, it was a manufacturer of hand portable and wheeled extinguishers for commercial and industrial applications.

28. In 2011, Amerex acquired Solberg Scandinavian AS, one of the largest manufacturers of AFFF products in Europe.

29. On information and belief, beginning in 2011, Amerex designed, manufactured, marketed distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

30. Defendant Buckeye Fire Equipment Company (“Buckeye”) is a corporation organized under the laws of the State of Ohio, with its principal place of business located at 110 Kings Road, Kings Mountain, North Carolina 28086.

31. On information and belief, Buckeye designed, manufactured, marketed, distributed, and sold AFFF products containing PFAS, including but not limited to PFOA and PFOS.

32. Defendant Tyco Fire Products LP (“Tyco”) is a limited partnership organized under the laws of the State of Delaware, with its principal place of business located at One Stanton Street, Marinette, Wisconsin 54143-2542.

33. Tyco is the successor in interest of The Ansul Company (“Ansul”), having acquired Ansul in 1990.

34. Beginning in or around 1975, Ansul designed, manufactured, marketed, distributed, and sold AFFF containing PFAS, including but not limited to PFOA and PFOS.

35. After Tyco acquired Ansul in 1990, Tyco/Ansul continued to design, manufacture, market, distribute, and sell AFFF products containing PFAS, including but not limited to PFOA

and PFOS.

36. Defendant Chemguard, Inc. (“Chemguard”) is a corporation organized under the laws of the State of Texas, with its principal place of business located at One Stanton Street, Marinette, Wisconsin 54143.

37. On information and belief, Chemguard designed, manufactured, marketed, distributed, and sold AFFF products containing PFAS, including but not limited to PFOA and PFOS.

38. On information and belief, Chemguard was acquired by Tyco International Ltd. in 2011.

39. On information and belief, the AFFF Defendants designed, manufactured, marketed, distributed, and sold AFFF/Component Products containing PFOS, PFOA, and/or their chemical precursors that were stored, handled, used, trained with, tested equipment with, otherwise discharged, and/or disposed at The Site(s).

ii. The Fluorosurfactant Defendants

40. The term “Fluorosurfactant Defendants” refers collectively to Defendants 3M, Arkema Inc., ChemDesign Products Incorporated, Chemguard Inc., Deepwater Chemicals, Inc., E.I. DuPont de Nemours and Company, The Chemours Company, The Chemours Company FC, LLC, DuPont de Nemours Inc., and Dynax Corporation.

41. Defendant Arkema, Inc. (“Arkema”) is a Pennsylvania corporation and does business throughout the United States. Arkema has its principal place of business at 900 1<sup>st</sup> Avenue, King of Prussia, Pennsylvania 19406.

42. Arkema develops specialty chemicals and fluoropolymers.

43. Arkema is an operating subsidiary of Arkema France, S.A.

44. On information and belief, Arkema designed, manufactured, marketed, distributed,

and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

45. Defendant ChemDesign Products Inc. (“ChemDesign”) is a corporation organized under the laws of Delaware, with its principal place of business located at 2 Stanton Street, Marinette, WI, 54143.

46. On information and belief, ChemDesign designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

47. Defendant Deepwater Chemicals, Inc. (“Deepwater”) is a corporation organized under the laws of Delaware, with its principal place of business located at 196122 E County Road 40, Woodward, OK, 73801.

48. On information and belief, Deepwater Chemicals designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

49. Defendant Dynax Corporation (“Dynax”) is a corporation organized under the laws of the State of Delaware, with its principal place of business located at 103 Fairview Park Drive, Elmsford, New York 10523.

50. On information and belief, Dynax entered into the AFFF market on or about 1991 and quickly became a leading global producer of fluorosurfactants and fluorochemical stabilizers containing PFOS, PFOA, and/or their chemical precursors.

51. On information and belief, Dynax designed, manufactured, marketed, distributed, and sold fluorosurfactants and fluorochemical stabilizers containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

52. Defendant E.I. du Pont de Nemours & Company (“DuPont”) is a corporation

organized under the laws of the State of Delaware, with its principal place of business located at 974 Centre Road, Wilmington, Delaware 19805.

53. Defendant The Chemours Company (“Chemours Co.”) is a limited liability company organized under the laws of the State of Delaware, with its principal place of business located at 1007 Market Street, P.O. Box 2047, Wilmington, Delaware, 19899.

54. In 2015, DuPont spun off its performance chemicals business to Chemours Co., along with vast environmental liabilities which Chemours Co. assumed, including those related to PFOS and PFOA and fluorosurfactants. On information and belief, Chemours Co. has supplied fluorosurfactants containing PFOS and PFOA, and/or their chemical precursors to manufacturers of AFFF products.

55. On information and belief, Chemours Co. was incorporated as a subsidiary of DuPont as of April 30, 2015. From that time until July 2015, Chemours Co. was a wholly-owned subsidiary of DuPont.

56. In July 2015, DuPont spun off Chemours Co. and transferred to Chemours Co. its “performance chemicals” business line, which includes its fluoroproducts business, distributing shares of Chemours Co. stock to DuPont stockholders, and Chemours Co. has since been an independent, publicly-traded company.

57. Defendant The Chemours Company FC, LLC (“Chemours FC”) is a limited liability company organized under the laws of the State of Delaware, with its principal place of business located at 1007 Market Street, Wilmington, Delaware, 19899.

58. Defendant Corteva, Inc. (“Corteva”) is a corporation organized and existing under the laws of Delaware, with its principal place of business at 974 Centre Rd., Wilmington, Delaware 19805.

59. Defendant Dupont de Nemours Inc. f/k/a DowDuPont, Inc. (“Dupont de Nemours

Inc.”) is a corporation organized and existing under the laws of Delaware, with its principal place of business at 974 Centre Road, Wilmington, Delaware 19805 and 2211 H.H. Dow Way, Midland, Michigan 48674.

60. On June 1, 2019, DowDuPont separated its agriculture business through the spin-off of Corteva.

61. Corteva was initially formed in February 2018. From that time until June 1, 2019, Corteva was a wholly-owned subsidiary of DowDuPont.

62. On June 1, 2019, DowDuPont distributed to DowDuPont stockholders all issued and outstanding shares of Corteva common stock by way of a pro-rata dividend. Following that distribution, Corteva became the direct parent of E. I. Du Pont de Nemours & Co.

63. Corteva holds certain DowDuPont assets and liabilities, including DowDuPont’s agriculture and nutritional businesses.

64. On June 1, 2019, DowDuPont, the surviving entity after the spin-off of Corteva and of another entity known as Dow, Inc., changed its name to DuPont de Nemours, Inc., to be known as DuPont (“New DuPont”). New DuPont retained assets in the specialty products business lines following the above-described spin-offs, as well as the balance of the financial assets and liabilities of E.I DuPont not assumed by Corteva.

65. Defendants E. I. Du Pont de Nemours and Company; The Chemours Company; The Chemours Company FC, LLC; Corteva, Inc.; and DuPont de Nemours, Inc. are collectively referred to as “DuPont” throughout this Complaint.

66. On information and belief, DuPont designed, manufactured, marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

67. On information and belief, 3M and Chemguard also designed, manufactured,

marketed, distributed, and sold fluorosurfactants containing PFOS, PFOA, and/or their chemical precursors for use in AFFF products.

68. On information and belief, the Fluorosurfactant Defendants designed, manufactured, marketed, distributed, and sold fluorosurfactants containing Toxic Surfactants for use in AFFF/Component Products that were stored, handled, used, trained with, tested equipment with, otherwise discharged, and/or disposed at the Site(s).

iii. The PFC Defendants

69. The term “PFC Defendants” refers collectively to 3M, AGC Chemicals Americas Inc., Archroma U.S., Inc., ChemDesign Products Inc., Chemicals, Inc., Clariant Corporation, Deepwater Chemicals, Inc., E. I. DuPont de Nemours and Company, The Chemours Company, The Chemours Company FC, LLC, Corteva, Inc., DuPont de Nemours Inc., and Nation Ford Chemical Company.

70. Defendant AGC Chemicals Americas, Inc. (“AGC”) is a corporation organized and existing under the laws of Delaware, having its principal place of business at 55 East Uwchlan Avenue, Suite 201, Exton, PA 19341.

71. On information and belief, AGC Chemicals Americas, Inc. was formed in 2004 and is a subsidiary of AGC Inc., a foreign corporation organized under the laws of Japan, with its a principal place of business in Tokyo, Japan.

72. AGC manufactures specialty chemicals. It offers glass, electronic displays, and chemical products, including resins, water and oil repellants, greenhouse films, silica additives, and various fluorointermediates.

73. On information and belief, AGC designed, manufactured, marketed, distributed, and sold PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

74. Defendant Archroma U.S. Inc. (“Archroma”) is a North Carolina company and does business throughout the United States. Archroma has its principal place of business at 5435 77 Center Drive, #10 Charlotte, North Carolina 28217.

75. Upon information and belief, Archroma is a subsidiary of Archroma Management, LLC, and manufactured, sold, and supplied fluorochemical products for use in AFFF sold throughout the United States. Upon information and belief, Archroma was formed in 2013 as part of the acquisition of Clariant Corporation’s Textile Chemicals, Paper Specialties and Emulsions business by SK Capital Partners.

76. Defendant Clariant Corporation (“Clariant”) is a corporation organized and existing under the laws of New York, with its principal place of business at 4000 Monroe Road, Charlotte, North Carolina 28205.

77. On information and belief, Clariant is the successor in interest to the specialty chemicals business of Sandoz Chemical Corporation (“Sandoz”). On information and belief, Sandoz spun off its specialty chemicals business to form Clariant in 1995.

78. On information and belief, Clariant designed, manufactured, marketed, distributed, and sold PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

79. Defendant Chemicals, Inc. (“Chemicals, Inc.”) is a corporation organized and existing under the laws of Texas, with its principal place of business located at 12321 Hatcherville, Baytown, TX 77520.

80. On information and belief, Chemicals, Inc. supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

81. Defendant Nation Ford Chemical Co. (“Nation Ford”) is a corporation organized

and existing under the laws of South Carolina, with its principal place of business located at 2300 Banks Street, Fort Mill, SC 29715.

82. On information and belief, Nation Ford supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

83. On information and belief, 3M, ChemDesign, Deepwater Chemicals, and DuPont also supplied PFCs containing PFOS, PFOA, and/or their chemical precursors for use in manufacturing the fluorosurfactants used in AFFF products.

84. On information and belief, the PFC Defendants supplied PFCs containing Toxic Surfactants for use in manufacturing the fluorosurfactants used in AFFF/Component Products that were stored, handled, used, trained with, tested equipment with, otherwise discharged, and/or disposed at the Site(s).

85. Defendants represent all or substantially all of the market for AFFF/Component Products at the Site(s).

### **FACTUAL ALLEGATIONS RELEVANT TO ALL CAUSES OF ACTION**

#### **A. PFOA and PFOS and Their Risk to Public Health**

86. PFAS are chemical compounds containing fluorine and carbon. These substances have been used for decades in the manufacture of, among other things, household and commercial products that resist heat, stains, oil, and water. These substances are not naturally occurring and must be manufactured.

87. PFOA is one of the two most widely studied types of PFAS substances.

88. PFOA has unique properties that causes it to be: (i) mobile and persistent, meaning that it readily spreads into the environment where it breaks down very slowly; (ii) bioaccumulative and biomagnifying, meaning that it tends to accumulate in organisms and up the food chain; and

(iii) toxic, meaning that it poses serious health risks to humans and animals.

89. PFOA easily dissolves in water, and thus it is mobile and easily spreads in the environment. PFOA also readily contaminates soils and leaches from the soil into groundwater, where it can travel significant distances.

90. PFOA is characterized by the presence of multiple carbon-fluorine bonds, which are exceptionally strong and stable. As a result, PFOA is thermally, chemically, and biologically stable. It resists degradation due to light, water, and biological processes.

91. Bioaccumulation occurs when an organism absorbs a substance at a rate faster than the rate at which the substance is lost by metabolism and excretion. Biomagnification occurs when the concentration of a substance in the tissues of organisms increases as the substance travels up the food chain.

92. PFOA bioaccumulates/biomagnifies in numerous ways. First, it is relatively stable once ingested, so that it bioaccumulates in individual organisms for significant periods of time. Because of this stability, any newly ingested PFOA will be added to any PFOA already present. In humans, PFOA remains in the body for years.

93. PFOA biomagnifies up the food chain. This occurs, for example, when humans eat fish that have ingested PFOA.

94. The chemical structure of PFOA makes it resistant to breakdown or environmental degradation. As a result, it is persistent when released into the environment.

95. Exposure to PFAS is toxic and poses serious health risks to humans and animals.

96. PFAS are readily absorbed after consumption or inhalation and accumulate primarily in the bloodstream, kidney, and liver.

## **B. AFFF Defendants' Manufacture and Sale of AFFF/Component Products**

97. AFFF is a type of water-based foam that was first developed in the 1970s to

extinguish hydrocarbon fuel-based fires.

98.     AFFF is a Class-B firefighting foam. It is mixed with water and used to extinguish fires that are difficult to fight, particularly those that involve petroleum or other flammable liquids.

99.     AFFF is synthetically formed by combining fluorine-free hydrocarbon foaming agents with fluorosurfactants. When mixed with water, the resulting solution produces an aqueous film that spreads across the surface of hydrocarbon fuel. This film provides fire extinguishment and is the source of the designation aqueous film-forming foam.

100.    Beginning in the 1970s, the AFFF Defendants designed, manufactured, marketed, distributed, and/or sold AFFF products that used fluorosurfactants containing PFOA, or the chemical precursors that degrade into PFOA.

101.    AFFF can be made without the fluorosurfactants that contain PFOA and/or its precursor chemicals. Fluorine-free firefighting foams, for instance, do not release PFOA, and/or its precursor chemicals into the environment.

102.    AFFF that contains fluorosurfactants, however, is better at extinguishing hydrocarbon fuel-based fires due to their surface-tension lowering properties, essentially smothering the fire and starving it of oxygen.

103.    The fluorosurfactants used in AFFF products sold by the AFFF Defendants were manufactured by the Fluorosurfactant Defendants through the process of telomerization.

104.    The PFCs the Fluorosurfactant Defendants needed to manufacture those fluorosurfactants contained PFOA, and/or its chemical precursors and were designed, manufactured, marketed, distributed and/or sold by the PFC Defendants.

105.    On information and belief, the PFC and Fluorosurfactant Defendants were aware that the PFCs and fluorosurfactants they designed, manufactured, marketed, distributed, and/or sold would be used in the AFFF products designed, manufactured, marketed, distributed, and/or

sold by the AFFF Defendants.

106. On information and belief, the PFC and Fluorosurfactant Defendants designed, manufactured, marketed, distributed, and/or sold the PFC and/or fluorosurfactants contained in the AFFF products discharged into the environment at the Site during fire protection, training, and response activities, resulting in widespread PFAS contamination.

107. On information and belief, the AFFF Defendants designed, manufactured, marketed, distributed, and/or sold the AFFF products discharged into the environment at the Site during fire protection, training, and response activities, resulting in widespread PFAS contamination.

**C. Defendants' Knowledge of the Threats to Public Health and the Environment Posed by PFOA**

108. On information and belief, by at least the 1970s the Defendants knew or should have known that PFOA is mobile and persistent, bioaccumulative and biomagnifying, and toxic.

109. On information and belief, the Defendants concealed from the public and government agencies its knowledge of the threats to public health and the environment posed by PFOA.

110. Some or all of the Defendants understood how stable the fluorinated surfactants used in AFFF are when released into the environment from their first sale to a customer, yet they failed to warn their customers or provide reasonable instruction on how to manage wastes generated from their products.

111. AFFF was first developed in the 1960s as a result of the U.S. Navy's research into the use of fluorosurfactants in firefighting foam to extinguish fuel-based shipboard fires.

112. In 1969, the Navy promulgated a military standard or "MilSpec" requiring contractors to use "fluorocarbon surfactants" in firefighting foam products. Since then, the Navy

has revised this MilSpec multiple times, but at no time did the Navy specify the specific fluorosurfactants to be used in AFFF. The AFFF MilSpec was a “performance specification,” meaning that the product manufacturers were given great flexibility with respect to designing a product that would meet the military’s performance requirements.

113. Firefighting foam can be made without the fluorosurfactants that contain PFOA and/or its precursor chemicals.

114. When the Navy first promulgated the AFFF MilSpec, hundreds of different fluorosurfactants had already been created.

115. The AFFF Defendants designed, manufactured, marketed, distributed, and/or sold AFFF products that used fluorosurfactants containing PFOA, or the chemical precursors that degrade into PFOA.

116. The AFFF Defendants utilized PFAS produced through a process, called fluorotelomerization. These fluorotelomer AFFF formulations were produced beginning in the 1970s. Although they are not made with PFOA, they contain precursors—polyfluorinated compounds that are known to degrade to compounds that include PFOA.

117. On information and belief, the AFFF Defendants designed, manufactured, marketed, distributed, and/or sold the AFFF products discharged into the environment during fire protection, training, and response activities conducted at the Site, resulting in widespread PFAS contamination.

118. The AFFF Defendants treated their foam formulations as proprietary information and did not disclose the specific chemical ingredients of their formulations to government agencies or the public.

119. Some or all of the Defendants understood how stable the fluorinated surfactants

used in AFFF are when released into the environment from their first sale to a customer, yet they failed to warn their customers or provide reasonable instruction on how to manage wastes generated from their products.

**D. The Impact of PFOA on the Environment and Human Health Is Revealed**

120. Once the truth about PFOA was revealed, researchers began to study the environmental and health effects associated with them, including a “C8 Science Panel” formed out of a class action settlement arising from contamination from DuPont’s Washington Works located in Wood County, West Virginia.

121. The C8 panel consisted of three epidemiologists specifically tasked with determining whether there was a probable link between PFOA exposure and human diseases. In 2012, the panel found probable links between PFOA and kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, pregnancy-induced hypertension (including preeclampsia), and hypercholesterolemia.

122. In laboratory testing on animals, PFOA has caused the growth of tumors, changed hormone levels, and affected the function of the liver, thyroid, pancreas, and immune system.

123. The injuries caused by PFAS can arise months or years after exposure.

124. Even after the C8 Science Panel publicly announced that human exposure to 50 parts per trillion, or more, of PFOA in drinking water for one year or longer had “probable links” with certain human diseases, including kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, preeclampsia, and medically-diagnosed high cholesterol, the Defendants repeatedly assured and represented to governmental entities, their customers, and the public (and continue to do so) that the presence of PFOA in human blood at the levels found within the United States presents no risk of harm and is of no legal, toxicological, or medical significance of any kind.

125. Furthermore, the Defendants have represented to and assured such governmental

entities, their customers, and the public (and continue to do so) that the work of the independent C8 Science Panel was inadequate to satisfy the standards of the Defendants to prove such adverse effects upon and/or any risk to humans with respect to PFOA in human blood.

126. At all relevant times, the Defendants, through their acts and/or omissions, controlled, minimized, trivialized, manipulated, and/or otherwise influenced the information that was published in peer-review journals, released by any governmental entity, and/or otherwise made available to the public relating to PFAS in human blood and any alleged adverse impacts and/or risks associated therewith, effectively preventing the public from discovering the existence and extent of any injuries/harm as alleged herein.

#### **E. The Fire Fighting Foam Coalition**

127. Following 3M's phase-out of ECF production and its AFFF products, telomerization emerged as the dominant manufacturing process for fluorosurfactants. 3M had been the dominant manufacturer in the lucrative AFFF market, and multiple companies seized the opportunity created by 3M's withdrawal. But the market opportunity presented uncertainties, as it was unclear whether regulators would view the telomer-based AFFF as posing the same hazards as 3M's AFFF that contained another type of long-chain PFAS, perfluorooctane sulfonate ("PFOS"). The key question for regulators was whether the telomer-based AFFF would degrade to PFOA once in the environment.

128. Defendants Tyco, Chemguard, Buckeye, and others formed a group called the Fire Fighting Foam Coalition ("FFFc") to protect their business opportunity and advocate for the continued use of telomer-based AFFF. The FFFC declared that it would serve as "a single source for accurate, balanced information on environment related questions" and would "ensure that accurate information about PFOS alternatives, including telomer-based products, is disseminated

in the marketplace.”<sup>1</sup> The FFFC made several representations regarding the safety of telomerbased AFFF that were either misleading half-truths or were contrary to the Defendants’ internal knowledge. For example, the FFFC assured the public that “telomer based AFFF does not contain PFOS and cannot be oxidized or metabolized into PFOS.”<sup>2</sup> This statement was true, but only because PFOS was exclusively manufactured by 3M, and it did not mean that telomer-based AFFF was any safer.

129. The FFFC also told the EPA in 2001 that telomer-based AFFF “does not contain any PFOA-based product.”<sup>3</sup> The issue, however, was whether telomer-based AFFF could degrade into PFOA. One company executive admitted in an internal memo that his company’s AFFF “will degrade in the environment” to produce PFOA and the “question is how toxic” and how “bioaccumulative” these degraded products are.<sup>4</sup> But contrary to this internal acknowledgment, the FFFC publicly asserted that “telomer based fire fighting foams are not likely to be a source of PFOA in the environment.”<sup>5</sup>

130. The EPA appointed a committee known as the Telomer Technical Workgroup to make recommendations to the agency. The president of the FFFC represented the telomer-based AFFF industry on the EPA committee. When, in 2003, the Telomer Technical Workgroup reported its conclusions and recommendations, the FFFC president was the spokesperson.

131. In what the FFFC president called a “major victory” for the industry, the EPA

---

<sup>1</sup> Fact Sheet on AFFF Fire Fighting Agents, *available at* [https://static.ewg.org/reports/2020/pfas-firefightertimeline/2002-03-FFFC.pdf?\\_ga=2.136386352.1253861871.1649070681-2123137255.1639662520](https://static.ewg.org/reports/2020/pfas-firefightertimeline/2002-03-FFFC.pdf?_ga=2.136386352.1253861871.1649070681-2123137255.1639662520).

<sup>2</sup> *Id.* Fact Sheet on AFFF Fire Fighting Agents, *available at* [https://static.ewg.org/reports/2020/pfasfirefighter-timeline/2002-03-FFFC.pdf?\\_ga=2.136386352.1253861871.1649070681-2123137255.1639662520](https://static.ewg.org/reports/2020/pfasfirefighter-timeline/2002-03-FFFC.pdf?_ga=2.136386352.1253861871.1649070681-2123137255.1639662520).

<sup>3</sup> *Id.* Fact Sheet on AFFF Fire Fighting Agents, *available at* [https://static.ewg.org/reports/2020/pfas-firefightertimeline/2002-03-FFFC.pdf?\\_ga=2.136386352.1253861871.1649070681-2123137255.1639662520](https://static.ewg.org/reports/2020/pfas-firefightertimeline/2002-03-FFFC.pdf?_ga=2.136386352.1253861871.1649070681-2123137255.1639662520).

<sup>4</sup> *In Re: Aqueous Film-Forming Foams Prods. Liab. Litig.*, 2:18-mn-02873-RMG:28, Email chain from John Dowling to Anne Regina re: EPA meeting: Comments (Apr. 18, 2001) attached as an exhibit to Plaintiffs’ Omnibus Opposition to Defendants’ Motion for Partial Summary Judgment on the Second and Third Prongs of the Government Contractor Immunity Defense, ECF 2409-112.

<sup>5</sup> PFOA ECA Plenary Meeting, *available at* [https://static.ewg.org/reports/2020/pfas-firefighter-timeline/2003-Telomers\\_Safe\\_Email.pdf?\\_ga=2.128105996.1253861871.1649070681-2123137255.1639662520](https://static.ewg.org/reports/2020/pfas-firefighter-timeline/2003-Telomers_Safe_Email.pdf?_ga=2.128105996.1253861871.1649070681-2123137255.1639662520).

accepted the proposal of its Workgroup that “telomer-based fire fighting foams no longer be considered as part of the PFOA ECA process.”<sup>6</sup> The FFFC president remarked that “[w]hen we started this organization two years ago [in 2001], the fate of telomer based AFFF was being tied directly to the fate of PFOA and the EPA had just told the military to start searching for alternatives to AFFF.”<sup>7</sup> The telomer-based AFFF Defendants had successfully forestalled government restrictions on their products, thereby prolonging the use of AFFF at the Site and elsewhere.

132. The fluorochemicals the Fluorosurfactant Defendants needed to manufacture those fluorosurfactants contained PFOA, and/or its chemical precursors and were designed, manufactured, marketed, distributed and/or sold by the PFC Defendants.

133. On information and belief, the PFC and Fluorosurfactant Defendants were aware that the fluorochemicals and fluorosurfactants they designed, manufactured, marketed, distributed, and/or sold would be used in the AFFF products designed, manufactured, marketed, distributed, and/or sold by the AFFF Defendants.

134. On information and belief, the PFC and Fluorosurfactant Defendants designed, manufactured, marketed, distributed, and/or sold the fluorochemicals and/or fluorosurfactants contained in the AFFF products discharged into the environment during fire protection, training, and response activities conducted at the Site, resulting in widespread PFAS contamination.

#### **F. Federal, State, and International Government Agencies Call for Monitoring and Cleanup of PFAS Contamination**

135. On May 2, 2012, the EPA published its Third Unregulated Contaminant Monitoring Rule (“UCMR3”), requiring public water systems nationwide to monitor for thirty contaminants

---

<sup>6</sup> *Id.* PFOA ECA Plenary Meeting, available at [https://static.ewg.org/reports/2020/pfas-firefighter-timeline/2003-Telomers\\_Safe\\_Email.pdf?\\_ga=2.128105996.1253861871.1649070681-2123137255.1639662520](https://static.ewg.org/reports/2020/pfas-firefighter-timeline/2003-Telomers_Safe_Email.pdf?_ga=2.128105996.1253861871.1649070681-2123137255.1639662520).

<sup>7</sup> *Id.* PFOA ECA Plenary Meeting, available at [https://static.ewg.org/reports/2020/pfas-firefighter-timeline/2003-Telomers\\_Safe\\_Email.pdf?\\_ga=2.128105996.1253861871.1649070681-2123137255.1639662520](https://static.ewg.org/reports/2020/pfas-firefighter-timeline/2003-Telomers_Safe_Email.pdf?_ga=2.128105996.1253861871.1649070681-2123137255.1639662520).

of concern between 2013 and 2015, including PFOS and PFOA.<sup>8</sup>

136. In the May 2015 “Madrid Statement on Poly- and Perfluoroalkyl Substances (PFAS’s),” scientists and other professionals from a variety of disciplines, concerned about the production and release into the environment of PFOA, called for greater regulation, restrictions, limits on the manufacture and handling of any PFOA containing product, and to develop safe nonfluorinated alternatives to these products to avoid long-term harm to human health and the environment.<sup>9</sup>

137. On May 25, 2016, the EPA released a lifetime health advisory level (HAL) for drinking water and health effects support documents for PFOS and PFOA.<sup>10</sup> The EPA developed the HAL to assist governmental officials in protecting public health when PFOS and PFOA are present in drinking water. The EPA HAL identified the concentration of PFOS and PFOA in drinking water at or below which adverse health effects are not anticipated to occur over a lifetime of exposure at 0.07 ppb or 70 ppt. The HAL was based on peer-reviewed studies of the effects of PFOS and PFOA on laboratory animals (rats and mice) and was also informed by epidemiological studies of human populations exposed to PFOS. These studies indicated that exposure to PFOS and PFOA over the HAL could result in adverse health effects, including:

- a. Developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations);
- b. Cancer (testicular and kidney);
- c. Liver effects (tissue damage);
- d. Immune effects (e.g., antibody production and immunity);

---

<sup>8</sup> *Revisions to the Unregulated Contaminant Monitoring Regulation (UCMR 3) for Public Water Systems*, 77 Fed. Reg. 26072 (May 2, 2012).

<sup>9</sup> Blum A, Balan SA, Scheringer M, Trier X, Goldenman G, Cousins IT, Diamond M, Fletcher T, Higgins C, Lindeman AE, Peaslee G, de Voogt P, Wang Z, Weber R. 2015. The Madrid statement on poly- and perfluoroalkyl substances (PFASs). *Environ Health Perspect* 123:A107–A111; <http://dx.doi.org/10.1289/ehp.1509934>.

<sup>10</sup> See Fed. Register, Vol. 81, No. 101, May 25, 2016, Lifetime Health Advisories and Health Effects Support Documents for Perfluorooctanoic Acid and Perfluorooctane Sulfonate.

e. Thyroid disease and other effects (e.g., cholesterol changes).

138. In 2016, the National Toxicology Program of the United States Department of Health and Human Services (“NTP”) and the International Agency for Research on Cancer (“IARC”) both released extensive analyses of the expanding body of research regarding the adverse effects of PFCs. The NTP concluded that both PFOA and PFOS are “presumed to be an immune hazard to humans” based on a “consistent pattern of findings” of adverse immune effects in human (epidemiology) studies and “high confidence” that PFOA and PFOS exposure was associated with suppression of immune responses in animal (toxicology) studies.<sup>11</sup>

139. IARC similarly concluded that there is “evidence” of “the carcinogenicity of . . . PFOA” in humans and in experimental animals, meaning that “[a] positive association has been observed between exposure to the agent and cancer for which a causal interpretation is . . . credible.”<sup>12</sup>

140. California has listed PFOA and PFOS to its Proposition 65 list as a chemical known to cause reproductive toxicity under the Safe Drinking Water and Toxic Enforcement Act of 1986.<sup>13</sup>

141. The United States Senate and House of Representatives passed the National Defense Authorization Act in November 2017, which included \$42 million to remediate PFC contamination from military bases, as well as devoting \$7 million toward the Investing in Testing Act, which authorizes the Center for Disease Control and Prevention (“CDC”) to conduct a study

---

<sup>11</sup> See U.S. Dep’t of Health and Human Services, Nat’l Toxicology Program, *NTP Monograph: Immunotoxicity Associated with Exposure to Perfluorooctanoic Acid or Perfluorooctane Sulfonate* (Sept. 2016), at 1, 17, 19, available at [https://ntp.niehs.nih.gov/ntp/ohat/pfoa\\_pfos/pfoa\\_pfosmonograph\\_508.pdf](https://ntp.niehs.nih.gov/ntp/ohat/pfoa_pfos/pfoa_pfosmonograph_508.pdf)

<sup>12</sup> See Int’l Agency for Research on Cancer, IARC Monographs: *Some Chemicals Used as Solvents and in Polymer Manufacture* (Dec. 2016), at 27, 97, available at <http://monographs.iarc.fr/ENG/Monographs/vol110/mono110.pdf>.

<sup>13</sup> California Office of Environmental Health Hazard Assessment, *Chemicals Listed Effective Nov. 10, 2017 as Known to the State of California to Cause Reproductive Toxicity: Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS)*, Nov. 9, 2017, available at <https://oehha.ca.gov/proposition-65/crnr/chemicalslisted-effective-november-10-2017-known-state-california-cause>.

into the long-term health effects of PFOA and PFOS exposure.<sup>14</sup> The legislation also required that the Department of Defense submit a report on the status of developing a new military specification for AFFF that did not contain PFOS or PFOA.<sup>15</sup>

142. In June 2018, the Agency for Toxic Substances and Disease Registry (“ATSDR”) and EPA released a draft toxicological profile for PFOS and PFOA and recommended the drinking water advisory levels be lowered to 11 ppt for PFOA and 7 ppt for PFOS.<sup>16</sup>

143. In December 2019, the United States Senate and House of Representatives passed the National Defense Authorization Act for Fiscal Year 2020 (“FY 2020 NDAA”), which introduced new prohibitions on the use of PFAS-containing AFFF for land-based applications.<sup>17</sup> Section 322 of the Act introduced a timeline for the phasing out of AFFF use by the military, including by requiring the Secretary of the Navy to publish a new military specification for a fluorine-free fire-fighting agent for use at all military installations by January 31, 2023. Section 322(b) and (c) then provide that Department of Defense organizations will no longer be authorized to purchase AFFF containing more than 1 part per billion of PFAS after October 1, 2023, and that after October 1, 2024, this prohibition will extend to the use of any PFAS-containing AFFF at any military installation.

144. On February 20, 2020, the EPA announced a proposed decision to regulate PFOA and PFOS under the Safe Drinking Water Act, which the agency characterized as a “key milestone” in its efforts to “help communities address per- and polyfluoroalkyl substances (PFAS)

---

<sup>14</sup> National Defense Authorization Act for Fiscal Year 2018, H.R. 2810, 115th Congress (2017), available at <https://www.congress.gov/115/plaws/plubl91/PLAW-115publ91.pdf>.

<sup>15</sup> *Id.*; see also U.S. Department of Defense, *Alternatives to Aqueous Film Forming Foam Report to Congress*, June 2018, available at <https://www.denix.osd.mil/derp/home/documents/alternatives-to-aqueous-film-forming-foam-report-to-congress/>.

<sup>16</sup> ATSDR, *Toxicological Profile for Perfluoroalkyls: Draft for Public Comment* (June 2018), available at <https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf>.

<sup>17</sup> National Defense Authorization Act for Fiscal Year 2020, S. 1790, 116th Congress (2019), available at <https://www.govinfo.gov/content/pkg/BILLS-116s1790enr/pdf/BILLS-116s1790enr.pdf>.

nationwide.”<sup>18</sup> Following a public comment period on its proposed decision, the EPA will decide whether to move forward with the process of establishing a national primary drinking water regulation for PFOA and PFOS.

145. On June 15, 2022, the EPA released new drinking water health advisory levels (HALs) for four PFAS, including new interim HALs for PFOS and PFOA that departed significantly from the 2016 EPA HAL they replaced.<sup>19</sup> Specifically, EPA issued HALs of 0.004 ppt for PFOA and 0.02 ppt for PFOS,<sup>20</sup> which collectively accounted for only a small fraction of the combined 70 ppt HAL that preceded them. Importantly, EPA set these interim HALs at levels below which PFOS and PFOA can be measured using current analytic methods, meaning that the mere detection of PFOS or PFOA in a water provider’s system would be sufficient on its own to exceed the new levels.

146. As support for its decision, EPA explained that the science had evolved since 2016 and that the new interim HALs for PFOS and PFOA were “based on human studies” that “found associations between PFOA and/or PFOS exposure and effects on the immune system, the cardiovascular system, human development (e.g., decreased birth weight), and cancer.”<sup>21</sup> Specifically, EPA had performed updated health effects analyses for PFOS and PFOA to provide support for the drinking water regulations the agency planned to adopt for the two chemicals under the SDWA. Based on these analyses, EPA concluded that “the levels at which negative health effects could occur are much lower than previously understood when EPA issued the 2016 health

---

<sup>18</sup> Press Release, *EPA Announces Proposed Decision to Regulate PFOA and PFOS in Drinking Water*, Feb. 20, 2020, available at <https://www.epa.gov/newsreleases/epa-announces-proposed-decision-regulate-pfoa-and-pfosdrinking-water>.

<sup>19</sup> See Fed. Register, Vol. 87, No. 36848, June 21, 2022, Lifetime Drinking Water Health Advisories for Four Perfluoroalkyl Substances.

<sup>20</sup> Id. Fed. Register, Vol. 87, No. 36848, June 21, 2022, Lifetime Drinking Water Health Advisories for Four Perfluoroalkyl Substances.

<sup>21</sup> EPA, *Drinking Water Health Advisories for PFAS Fact Sheet for Communities* at 1-2 (June 2022), available at <https://www.epa.gov/system/files/documents/2022-06/drinking-water-ha-pfas-factsheet-communities.pdf>.

advisories for PFOA and PFOS – including near zero for certain health effects.”<sup>22</sup> For this reason, the agency determined there was a “pressing need to provide updated information on the current best available science to public health officials prior to finalization of the health effects assessment.”<sup>23</sup>

147. Because the referenced health analyses are still undergoing final review by EPA’s Science Advisory Board, the agency has stated that the new interim HALs for PFOS and PFOA are subject to change. EPA has indicated, however, that it does not anticipate any changes resulting in revised HALs for PFOS and PFOA that are greater than the 4 ppt minimum reporting level<sup>24</sup> that applies to Public Water Systems.<sup>25</sup>

148. On September 6, 2022, EPA published a notice of proposed rulemaking seeking public comment on its plan to designate PFOS and PFOA as hazardous substances under CERCLA.<sup>26</sup> Pursuant to that notice, all comments from the public must be submitted by November 7, 2022.

149. On October 5, 2022, the Governor of New York signed legislation (S.8763A/A.9824A) allowing public water suppliers to revive any action, civil claim, or cause of action involving an emerging contaminant in drinking water that may have been barred because

---

<sup>22</sup> EPA, *Drinking Water Health Advisories for PFAS Fact Sheet for Public Water Systems* at 2 (June 2022), available at <https://www.epa.gov/system/files/documents/2022-06/drinking-water-ha-pfas-factsheet-watersystem.pdf>.

<sup>23</sup> EPA Office of Water, EPA Doc. No. 822-R-22-003, *INTERIM Drinking Water Health Advisory: Perfluorooctanoic Acid (PFOA) CASRN 335-67-1* at 18 (June 2022), available at <https://www.epa.gov/system/files/documents/2022-06/interim-pfoa-2022.pdf>; EPA Office of Water, EPA Doc. No. 822-R-22-004, *INTERIM Drinking Water Health Advisory: CASRN 1763-23-1* at 18 (June 2022), available at <https://www.epa.gov/system/files/documents/2022-06/interim-pfoss-2022.pdf>.

<sup>24</sup> As EPA’s website explains, the Minimum Reporting Level (“MRL”) for Unregulated Contaminant Monitoring Rule (UCMR) 5 is the minimum quantitation level that, with 95 percent confidence, can be achieved by capable analysts at 75 percent or more of the laboratories using a specified analytical method. The MRLs in EPA’s chart are based on the UCMR 5 requirement to use EPA Method 533.

<sup>25</sup> EPA, *Drinking Water Health Advisories for PFAS Fact Sheet for Public Water Systems* at 2 (June 2022), available at <https://www.epa.gov/system/files/documents/2022-06/drinking-water-ha-pfas-factsheet-watersystem.pdf>.

<sup>26</sup> See Designation of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) as CERCLA Hazardous Substances, 87 Fed. Reg. 54415 (Sep. 6, 2022).

the statute of limitations had expired.

150. The legislation defines an emerging contaminant as any physical, chemical, microbiological, or radiological substance that is identified or listed as an emerging contaminant in public health or any other law, which would include the PFAS chemicals at issue in this action.

151. The law gave local water authorities until April 5, 2024, to pursue actions against polluters to recover the costs of treatment and filtration as a result of contamination that might otherwise be barred under the statute of limitations.

152. On January 6, 2023, the Defense Logistics Agency within the Department of Defense published a new Military Specification for “Fire Extinguishing Agent, Fluorine-Free Foam (F3) Liquid Concentrate, for Land-Based, Fresh Water Application,” MIL-PRF-32725 (“F3 MilSpec”) in accordance with § 332(a)(1) of the FY 2020 NDAA.<sup>27</sup> This new specification will govern fire extinguishing foams used by all Department of Defense organizations and will require such foams to test “non-detect” for PFAS. The specification further requires manufacturers to “certify in writing that PFAS has not intentionally been added to the concentrate.”

#### **G.     AFFF Containing PFOS and PFOA Is Fungible and Commingled in the Groundwater**

153. AFFF containing PFOS and/or PFOA, once it has been released to the environment, lacks characteristics that would enable identification of the company that manufactured that particular batch of AFFF or chemical feedstock.

154. A subsurface plume, even if it comes from a single location, such as a retention pond or fire training area, originates from mixed batches of AFFF and chemical feedstock coming from different manufacturers.

---

<sup>27</sup> Available on the Defense Logistics Agency’s website, [https://quicksearch.dla.mil/qsDocDetails.aspx?ident\\_number=285047](https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=285047).

155. Because precise identification of the specific manufacturer of any given AFFF/Component Product that was a source of the PFAS found at the Site is nearly impossible, given certain exceptions, Plaintiff must pursue all the Defendants, jointly and severally. The Defendants are also jointly and severally liable because they conspired to conceal the true toxic nature of PFOS and PFOA, to profit from the use of AFFF/Component Products containing PFOS and PFOA, at Plaintiff's expense, and to attempt to avoid liability.

#### **H. Plaintiff's Exposure and Damages**

156. Years of ingestion and dermal absorption of contaminated water from water districts have exposed unknowing residents in the Site area(s) to PFCs at concentrations hazardous to their health.

157. Plaintiff has been injured as a result of receiving water with elevated levels of PFCs, including PFOA and PFOS.

158. Plaintiff has suffered exposure, bioaccumulation of PFCs in their blood, personal injury due to PFC contamination of the water supplies caused by Defendants' manufacture, distribution, and sale of AFFF/Component Products.

159. Plaintiff seeks recovery from all Defendants for injuries, damages, and losses suffered by the Plaintiff, who suffered injuries as a direct and proximate result of exposure to and consumption of PFC-contaminated water from the municipal and private drinking water supplies, in an amount to be determined at trial, exclusive of interest, costs, and attorney fees.

#### **MARKET SHARE LIABILITY, ALTERNATIVE LIABILITY, CONCERT OF ACTION, AND ENTERPRISE LIABILITY**

160. The Defendants in this action are manufacturers that control a substantial share of the market for AFFF/Component Products containing PFOA, and/or its chemical precursors in the United States and are jointly responsible for the contamination of the groundwater at the Site area(s). Market share liability attaches to all the Defendants and the liability of each should be

assigned according to its percentage of the market for AFFF/Component Products at issue in this Complaint.

161. Because PFAS is fungible, it is impossible to identify the exact Defendant who manufactured any given AFFF/Component Product containing PFOS, PFOA, and/or their chemical precursors found free in the air, soil or groundwater, and each of these Defendants participated in a territory-wide and U.S. national market for AFFF/Component Products during the relevant time.

162. Concert of action liability attaches to all the Defendants, each of which participated in a common plan to commit the torts alleged herein and each of which acted tortuously in pursuance of the common plan to knowingly manufacture and sell inherently dangerous AFFF/Component Products containing PFOS, PFOA, and/or its chemical precursors.

163. Enterprise liability attaches to all the named Defendants for casting defective products into the stream of commerce.

### **CONSPIRACY**

164. Defendants actually knew of the health and environmental hazards which PFOA and PFOS posed to Plaintiffs.

165. Beginning in the 1970s and continuing through the date of this Complaint, Defendants formed joint task forces, committees and otherwise colluded for the avowed purpose of providing information about AFFF/Component Products containing PFOA and/or PFOS to the public and to government agencies with the unlawful purpose of:

166. Creating a market for AFFF/Component Products containing PFOA and/or PFOS despite knowledge of the hazards which PFOA and PFOS posed to the groundwater in the Site and the residents who depend on such water;

167. Concealing the environmental properties and toxic nature of PFOA and PFOS, and

its impact on Plaintiffs and the environment; and

168. Maximizing profits in a way Defendants knew or should have known would result in the contamination of Plaintiff's drinking water.

169. Defendants carried out their conspiracy by one or more of the following overt acts or omissions:

170. Intentionally representing to the DOD, USAF, USEPA and the public that AFFF/Component Products containing PFOA and PFOS were safe and did not pose an environmental or human health risk;

171. Concealing the dangers of PFOA and PFOS (including toxicological information on the dangers of the chemicals to living organisms, adverse fate and transport characteristics, and the propensity of PFOA and PFOS to contaminate groundwater) from the government and the public by, among other means, repeatedly requesting that information about the dangers and health effects of PFOA and PFOS be suppressed and not otherwise published, and by downplaying any adverse findings relating to PFOA and PFOS;

172. Concealing the dangers of AFFF/Component Products containing PFOA and PFOS from end users, sensitive receptors, public water suppliers, and the users and consumers of groundwater;

173. Using their considerable resources to fight PFOA and PFOS regulation; and

174. Collectively deciding to use PFOA and/or PFOS rather than other, safer surfactants because AFFF/Component Products containing PFOA and/or PFOS were the most profitable surfactant for Defendants to use.

175. As a direct and proximate result of the Defendants' described above conspiracy, PFOA and PFOS, at all times relevant to this litigation has:

176. Posed and continues to pose a health threat to Plaintiff because it has bioaccumulated in their body.

### **CAUSES OF ACTION**

#### **COUNT I:** **DEFECTIVE DESIGN**

177. Plaintiff hereby incorporates by reference the allegations contained in the preceding paragraphs of this Complaint and further alleges the following:

178. As manufacturers of AFFF/Component Products containing PFOS, PFOA, and/or their chemical precursors, the Defendants owed a duty to all persons whom its products might foreseeably harm, including Plaintiff, and not to market any product which is unreasonably dangerous in design for its reasonably anticipated use.

179. The Defendants' AFFF/Component Products were unreasonably dangerous for its reasonably anticipated uses for the following reasons:

- a. PFAS causes extensive groundwater contamination, even when used in its foreseeable and intended manner;
- b. Even at extremely low levels, PFAS render drinking water unfit for consumption;
- c. PFAS poses significant threats to public health; and
- d. PFAS create real and potential environmental damage.

180. The Defendants knew of these risks and failed to use reasonable care in the design of their AFFF/Component Products.

181. AFFF containing PFOS, PFOA, and/or their chemical precursors poses a greater danger to the environment and to human health than would be expected by ordinary persons such as Plaintiff and the general public.

182. At all times, the Defendants were capable of making AFFF/Component Products that did not contain PFOS, PFOA, and/or their chemical precursors. Thus, reasonable alternative

designs existed which were capable of preventing Plaintiff's injuries.

183. The risks posed by AFFF containing PFOS, PFOA, and/or their chemical precursors far outweigh the products' utility as a flame-control product.

184. The likelihood that the Defendants' AFFF/Component Products would be spilled, discharged, disposed of, or released into the environment and contaminate Plaintiff's drinking water supply far outweighed any burden on the Defendants to adopt an alternative design, and outweighed the adverse effect, if any, of such alternative design on the utility of the product.

185. As a direct and proximate result of the Defendants' unreasonably dangerous design, manufacture, and sale of AFFF/Component Products containing PFOS, PFOA, and/or their chemical precursors, Plaintiff has been injured in that their exposure to PFOA, PFOS, and potentially other toxic substances have produced an increased level of PFOA and PFOS in Plaintiff's blood stream, leading to the bioaccumulation of PFOA and PFOS in their body and significantly increasing their risk of developing numerous serious medical conditions.

186. As a result of Defendants manufacture, sale, or distribution of a defective product, Defendants are strictly liable in damages to Plaintiff.

187. Defendants' acts were willful, wanton, reckless and/or conducted with a reckless indifference to the rights of Plaintiff.

188. Defendants knew that it was substantially certain that their acts and omissions described above would injure Plaintiff. Defendants committed each of the above-described acts and omissions knowingly, willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless disregard for Plaintiff's health and safety.

WHEREFORE, the Plaintiff prays judgments against the Defendants for actual, compensatory, consequential, and punitive damages, together with the costs of this action, and for such other and further relief as this Court may deem fit, just, and proper.

**COUNT II:**  
**FAILURE TO WARN**

189. Plaintiff hereby incorporates by reference the allegations contained in the preceding paragraphs of this Complaint and further alleges the following:

190. As manufacturers of AFFF/Component Products containing PFOS, PFOA, and/or their chemical precursors, the Defendants had a duty to provide adequate warnings of the risks of these products to all persons whom its product might foreseeably harm, including Plaintiff and the public.

191. The Defendants' AFFF/Component Products were unreasonably dangerous for its reasonably anticipated uses for the following reasons:

- a. PFAS causes extensive groundwater contamination, even when used in its foreseeable and intended manner;
- b. Even at extremely low levels, PFAS render drinking water unfit for consumption;
- c. PFAS poses significant threats to public health; and
- d. PFAS create real and potential environmental damage.

192. The Defendants knew of the health and environmental risks associated with their AFFF/Component Products, and failed to provide a warning that would lead an ordinary reasonable user or handler of a product to contemplate the dangers associated with their products or an instruction that would have avoided Plaintiff's injuries.

193. Despite the Defendants' knowledge of the environmental and human health hazards associated with the use and/or disposal of their AFFF/Component Products in the vicinity of drinking water supplies, including PFAS contamination of public drinking supplies and private wells, the Defendants failed to issue any warnings, instructions, recalls, or advice regarding their AFFF/Component Products to Plaintiff, governmental agencies or the public.

194. As a direct and proximate result of Defendants' failure to warn, Plaintiff has been

injured in that their exposure to PFOA, PFOS, and potentially other toxic substances have produced an increased level of PFOA and PFOS in Plaintiff's blood stream, leading to the bioaccumulation of PFOA and PFOS in their body and significantly increasing their risk of developing numerous serious medical conditions.

195. Defendants knew that it was substantially certain that their acts and omissions described above would injure Plaintiff. Defendants committed each of the above-described acts and omissions knowingly, willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless disregard for Plaintiff's health and safety.

WHEREFORE, the Plaintiff prays judgments against the Defendants for actual, compensatory, consequential, and punitive damages, together with the costs of this action, and for such other and further relief as this Court may deem fit, just, and proper.

**COUNT III:**  
**NEGLIGENCE**

196. Plaintiff hereby incorporates by reference the allegations contained in the preceding paragraphs of this Complaint and further alleges the following:

197. As manufacturers of AFFF/Component Products containing PFOA, and/or its chemical precursors, the Defendants owed a duty to Plaintiff and to all persons whom its products might foreseeably harm and to exercise due care in the formulation, manufacture, sale, labeling, warning, and use of PFAS-containing AFFF.

198. The Defendants owed a duty to Plaintiff to act reasonably and not place inherently dangerous AFFF/Component Products into the marketplace when its release into the air, soil, and water was imminent and certain.

199. Defendants knew or should have known that PFAS were leaching from AFFF used for fire protection, training, and response activities.

200. Defendants knew or should have known that PFAS are highly soluble in water, highly mobile, extremely persistent in the environment, and highly likely to contaminate water supplies if released into the environment.

201. Defendants knew or should have known that the manner in which they were designing, manufacturing, marketing, distributing, and selling their AFFF/Component Products would result in contamination of Plaintiff's water supply with PFAS in varying amounts over time, causing Plaintiff significant injuries and damages.

202. Despite the fact that the Defendants knew or should have known that PFAS are toxic, can contaminate water resources and are carcinogenic, the Defendants negligently:

- a. designed, manufactured, formulated, handled, labeled, instructed, controlled, marketed, promoted, and/or sold AFFF/Component Products containing PFOA, and/or its chemical precursors;
- b. issued deficient instructions on how their AFFF/Component Products should be used and disposed of, thereby permitting PFAS to contaminate the groundwater in and around the Site;
- c. failed to recall and/or warn the users of their AFFF/Component Products of the dangers of groundwater contamination as a result of standard use and disposal of their products;
- d. failed and refused to issue the appropriate warning and/or recalls to the users of their AFFF/Component Products; and
- e. failing to take reasonable, adequate, and sufficient steps or actions to eliminate, correct, or remedy any contamination after it occurred.

203. The magnitude of the burden on the Defendants to guard against this foreseeable harm to Plaintiff was minimal, as the practical consequences of placing this burden on the Defendants amounted to a burden to provide adequate instructions, proper labeling, and sufficient warnings about their AFFF/Component Products.

204. As manufacturers, Defendants were in the best position to provide adequate

instructions, proper labeling, and sufficient warnings about their AFFF/Component Products, and to take steps to eliminate, correct, or remedy any contamination they caused.

205. As a direct and proximate result of Defendants' negligence, Plaintiff has been injured in that their exposure to PFOA, PFOS, and potentially other toxic substances have produced an increased level of PFOA and PFOS in Plaintiff's blood stream, leading to the bioaccumulation of PFOA and PFOS in their body and significantly increasing their risk of developing numerous serious medical conditions.

206. The Defendants knew that it was substantially certain that their acts and omissions described above would contaminate Plaintiff's water supply with PFAS in varying amounts over time, causing Plaintiff significant injuries and damages. The Defendants committed each of the above-described acts and omissions knowingly, willfully, and/or with fraud, oppression, or malice, and with conscious and/or reckless disregard for Plaintiff's health and safety.

WHEREFORE, the Plaintiff prays judgments against the Defendants for actual, compensatory, consequential, and punitive damages, together with the costs of this action, and for such other and further relief as this Court may deem fit, just, and proper.

**COUNT IV:**

**PUNITIVE DAMAGES**

207. Plaintiff hereby incorporates by reference the allegations contained in the preceding paragraphs of this Complaint and further alleges the following:

208. The Defendants engaged in willful, wanton, malicious, and or/reckless conduct that caused the foregoing damage upon Plaintiff, disregarding their protected rights.

209. The Defendants' willful, wanton, malicious, and/or reckless conduct includes but is not limited to the Defendants' failure to take all reasonable measures to ensure PFAS would not be released into the environment and inevitably contaminate Plaintiff's water supply which was

contaminated and continues to be contaminated with PFAS in varying amounts over time, causing Plaintiff significant injury and damage.

210. The Defendants have caused great harm to Plaintiff, acting with implied malice and an outrageously conscious disregard for Plaintiff's rights and safety, such that the imposition of punitive damages is warranted.

WHEREFORE, the Plaintiff prays judgments against the Defendants for actual, compensatory, consequential, and punitive damages, together with the costs of this action, and for such other and further relief as this Court may deem fit, just, and proper.

**PRAYER FOR RELIEF**

WHEREFORE, Plaintiff demands judgment against the Defendants, and each of them, jointly and severally, and request the following relief from the Court:

- a. A declaration that the Defendants acted with negligence, gross negligence, and/or willful, wanton, and careless disregard for the health, safety of Plaintiff;
- b. an order for an award of attorney fees and costs, as provided by law;
- c. pre-judgment and post-judgment interest as provided by law;
- d. equitable or injunctive relief;
- e. an order for all such other relief the Court deems just and proper;
- f. an award of punitive damages in an amount sufficient to deter Defendants' similar wrongful conduct in the future;
- g. an award of compensatory damages to Plaintiff for past and future damages including but not limited, to pain and suffering for severe and permanent personal injuries sustained by the Plaintiff, health care costs, medical monitoring, together with interest and costs as provided by law;

- h an award of consequential damages; and
- i an order for all such other relief the Court deems just and proper.

**JURY DEMAND**

The Plaintiff hereby demands a trial by jury.

Dated: 03/18/2025

Respectfully Submitted,

AYLSTOCK, WITKIN, KREIS & OVERHOLTZ, PLI

/s/ Douglass A. Kreis

Douglass A. Kreis  
Bryan F. Aylstock  
Justin G. Witkin  
dkreis@awkolaw.com  
baylstock@awkolaw.com  
jwitkin@awkolaw.com  
17 East Main Street, Suite 200  
Pensacola, FL 32502  
Phone: (850) 202-1010

*Attorneys for Plaintiff*